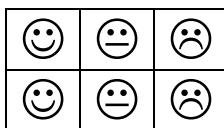
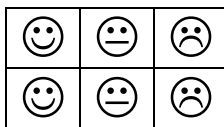


COORDINATES, SYMMETRY AND TRANSFORMATIONS

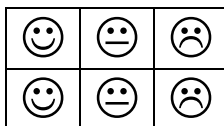
A: I can plot points in all four quadrants of a coordinate grid



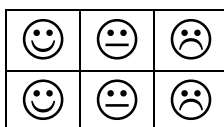
B: I can identify points in all four quadrants of a coordinate grid



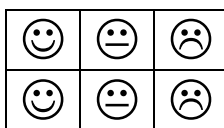
C: I can find coordinates of missing vertices of 2D shapes



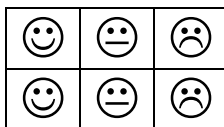
D: I can find the midpoint between 2 points on a coordinate grid



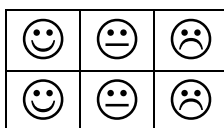
E: I can use correct notation to describe transformations of points or 2D shapes



F: I can reflect points/2D shapes in a given line and find the coordinates of the image

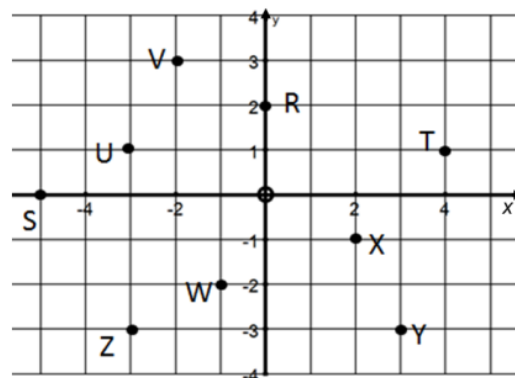


G: I can translate points/2D shapes and find the coordinates of the image



Draw a suitable coordinate diagram to plot the points A(3,7), B(-1, 4), C(0,-7), D(-1, -6), E(2,0) and F(3, -2).

Write down the coordinates of the points R, S, T, U, V, W, X, Y and Z.



Plot (-1,2), (1, -2) and (-1, -3).

Find a coordinate which would be the fourth vertex of :-

a) Rectangle b) Kite c) Rhombus

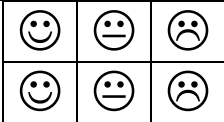
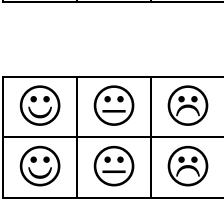
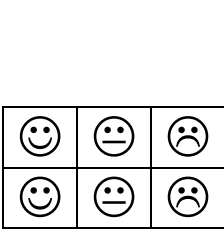
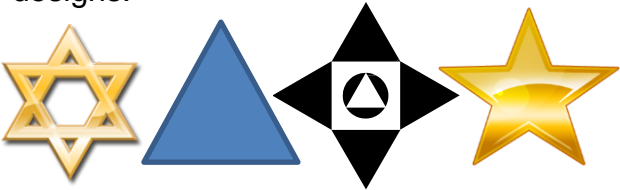
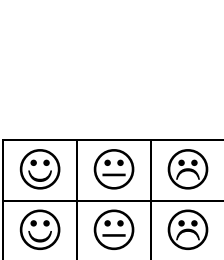
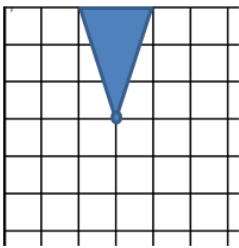
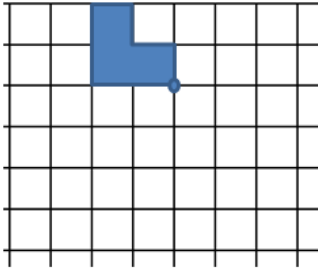
Find the midpoint the points:-

- A(3,4) and B(7,4)
- C(-1,3) and D(-1,9)
- E(2,1) and F(8,7)
- G(-3,1) and H(5,-5)

Plot the points X(2,1), Y(8,3) and Z(5,6). Carry out the following transformations and label the vertices of the new shape.

- Reflect the points in the x-axis
- Reflect the points in the line $y=x$

- Translate the points 6 units left and 1 unit up

<p>H: I can rotate points/2D shapes about a given centre and find the coordinates of the image</p>		<p>d) Rotate each point 180° clockwise e) Rotate each point 90° anti-clockwise</p>
<p>I: I can enlarge 2D shapes using a given centre and find the coordinates of the image</p>		<p>f) Enlarge XYZ by a scale factor of 2 through the origin g) Enlarge XYZ by a scale factor of 3 through the point (2,3)</p>
<p>J: I can use mathematical vocabulary to describe rotational symmetry of shapes</p>		<p>Describe the symmetry of the following designs:-</p> 
<p>K: I can use rotational properties of shape to complete designs</p>		<p>Complete the following designs following the given instructions.</p> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div data-bbox="932 1025 1171 1272">  </div> <div data-bbox="1203 1025 1522 1294">  </div> </div> <p>Half turn symmetry Quarter turn symmetry</p>